

Product Specifications



FSJ4-75A

FSJ4-75A, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket



CHARACTERISTICS

Construction Materials

Jacket Material	PE
Dielectric Material	Foam PE
Flexibility	Superflexible
Inner Conductor Material	Copper-clad steel wire
Jacket Color	Black
Outer Conductor Material	Corrugated copper

Dimensions

Nominal Size	1/2 in
Cable Weight	0.22 kg/m 0.15 lb/ft
Diameter Over Dielectric	0.370 in 9.398 mm
Diameter Over Jacket	0.530 in 13.462 mm
Inner Conductor OD	0.080 in 2.032 mm
Outer Conductor OD	0.480 in 12.192 mm

Electrical Specifications

Cable Impedance	75 ohm \pm 2 ohm
Capacitance	55 pF/m 17 pF/ft
dc Resistance, Inner Conductor	1.500 ohms/kft 4.922 ohms/km
dc Resistance, Outer Conductor	1.000 ohms/kft 3.281 ohms/km
dc Test Voltage	2500 V
Inductance	0.094 μ H/ft 0.308 μ H/m
Insulation Resistance	100000 MOhm
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 1000 MHz
Peak Power	10.0 kW

Product Specifications



Pulse Reflection	1%
Velocity	81%

Environmental Specifications

Installation Temperature	-25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °F)

Mechanical Specifications

Bending Moment	2.0 ft lb 2.7 N·m
Flat Plate Crush Strength	1.9 kg/mm 105.0 lb/in
Minimum Bend Radius, Multiple Bends	1.25 in 31.75 mm
Number of Bends, minimum	20
Number of Bends, typical	50
Tensile Strength	140 lb 64 kg

Standard Conditions

Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C

Attenuation

Frequency (MHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)
0.5	0.065	0.213	10.00
1	0.092	0.301	10.00
1.5	0.112	0.369	10.00
2	0.13	0.427	10.00
10	0.293	0.962	5.83
20	0.417	1.369	4.10
30	0.514	1.685	3.33
50	0.668	2.192	2.56
88	0.896	2.94	1.91
100	0.958	3.143	1.79
108	0.997	3.272	1.71
150	1.186	3.89	1.44
174	1.283	4.208	1.33
200	1.381	4.532	1.24
300	1.716	5.632	1.00
400	2.006	6.582	0.85
450	2.139	7.019	0.80
500	2.267	7.437	0.75
512	2.296	7.535	0.74
600	2.507	8.224	0.68
700	2.731	8.96	0.63
800	2.943	9.655	0.58

Product Specifications



824	2.992	9.817	0.57
894	3.133	10.278	0.55
960	3.261	10.701	0.52
1000	3.338	10.951	0.51